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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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34610	7590	05/07/2004	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			LONSBERRY, HUNTER B	
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			2611	
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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/706,792

Applicant(s)

YU, WON-UK

Examiner

Hunter B. Lonsberry

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments filed 2/24/04 have been fully considered but they are not persuasive.

1) Applicant argues, "However, York does not teach or suggest that its TV transmits control signals to the personal computer. More specifically, York does not teach or suggest a TV having a coding unit, which encodes control signals including a TV signal, which is then transmitted by a transmission, and receiving unit to a computer over a transmission line. Instead, York merely discloses a video/audio receiver 15 and a number of plug in modules in a TV that receive control signals from the computer; that is, York does not teach or suggest a TV having coding and transmission units which encode and transmit control signals to a computer as recited in claim 1." (Pages 13-14)

Regarding applicant's argument 1, claims 1 and 3, merely require the use of a TV coding unit that encodes a TV signal generated in a TV and generating a first packet signal. Claim 1 is silent as to whether the TV coding unit is located within a television or external to the television. Claims 1 and 3 as originally presented contained the language "such as" and rendered the TV signal language to be indefinite. In order to address the new limitation, the examiner presents U.S. Patent 6,567,032 to Mullaly in which a TV generates a control signal, which is distributed to other devices on a network.

2) Applicant argues that York fails to teach the use of a first and second transmission line. (Pages 12-14)

Regarding applicants argument 2, York discloses a wireless link between the computer module 5 and TV module 5. In the previous office action, the examiner took official notice in claims 1 and 2 regarding the use of transmission lines to transmit data from the computer to the TV and vice versa to address the requirements of claims 1 and 2.

3) Applicant argues that York fails to disclose receiving any control data from the TV as required in claim 7. (Page 15)

Regarding applicants argument 3, the examiner agrees that York is silent regarding transmitting control data from a TV to a PC. In the previous office action, the examiner relied upon official notice to address this limitation. The examiner has substituted U.S. 6,567,032 to Mullaly for the official notice in the previous office action.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 9, 10, 12-17, 19-22, 24-27, 29-32 and 34-35 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,567,032 B1 to Mullaly.

Regarding claims 9, 10, 13, 14, 16, Mullaly discloses a system in which a remote control unit with a trackball is used to issue a command to an appliance device which

relays it to the intended device, which may be a television, personal computer, stereo or other home equipment which are networked together in a wireless or wire line network, in Figures 13a/b a user points the remote control device to a TV to control a GUI, the TV then generates a control signal which it sends to the intended receiving appliance to perform an action, for example, switching the audio output from the TV to the stereo (column 3, lines 4-45, column 8, lines 8-12, column 15, line 7-column 17, line 23).

Regarding claims 12, 15, 19, 24, 29, and 33, Mullaly discloses that the remote control may receive voice input commands (column 8, lines 8-14). Mullaly inherently makes use of a microphone, as a microphone is required to receive a voice signal prior to converting it into a computer readable format for manipulation.

Regarding claims 17, 20-22, 25-27, 30-32, and 35, Mullaly discloses a system in which a remote control unit with a trackball is used to issue a command to an appliance device which relays it to the intended device, which may be a television, personal computer, stereo or other home equipment which are networked together in a wireless or wire line network, in Figures 13a/b a user points the remote control device to a TV to control a GUI, the TV then generates a control signal which it sends to the intended receiving appliance to perform an action, for example, switching the audio output from the TV to the stereo (column 3, lines 4-45, column 8, lines 8-12, column 15, line 7-column 17, line 23).

Mullaly inherently contains an encoder and transmitter as an encoder is required to put the signal in a format readable by another device and a transmitter is required for wireless transmission to another device.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 10, 11, 18, 23, 28, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,850,340 to York in view of U.S. Patent 6,567,032 B1 to Mullaly.

Regarding claim 1, York discloses in figure 4, a computer module 5, which includes a tuner/genlock cartridge 16, which has a built in TV tuner or STB that receives CATV data from a CATV network, Tuner/Genlock 16 outputs a television signal, or mixed TV signal with computer overlays, a VGA/NTSC encoder 9 outputs a computer signal, both the computer module 5 output and computer output are fed to RF AV transmitter 10, which transmits wirelessly to a base unit module 12 that includes RF receiver 15, which is located near television 11, the data is then displayed on a television, a user may use a remote pointer or remote keyboard 13 to control both the computer, as well as program selection and other controls on the television, these commands are received by RF receiver 6, and fed into PC 1, a user may select which output they view, additionally a cable modem 26 within base unit module 12, transmits cable modem data received from a cable outlet near TV 11, to a cable modem receiver 27 within computer module 5, the data is then relayed to PC 1 to be processed (column

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3, lines 9-26, column 4, line 9-column 5, line 4, lines 31-53 column 6, line 53-column 7, line 7, column 7, line 56-column 8, line 43, column 8, lines 57-column 9, line 28). York does not disclose transmission lines connecting the TV and computer transmission/receiving units, but instead utilizes wireless RF, and packet signals related to the computer and TV outputs, nor does York disclose a TV signal.

Mullaly discloses a system in which a remote control unit with a trackball is used to issue a command to an appliance device which relays it to the intended device, which may be a television, personal computer, stereo or other home equipment which are networked together in a wireless or wire line network, in Figures 13a/b a user points the remote control device to a TV to control a GUI, the TV then generates a control signal which it sends to the intended receiving appliance to perform an action, for example, switching the audio output from the TV to the stereo (column 3, lines 4-45, column 8, lines 8-12, column 15, line 7-column 17, line 23).

The examiner takes official notice that utilizing a transmission line to connect a PC/STB to a television, and transmitting packetized video from different sources, such as a digital set top box is well known in the art.

Therefore it would have been obvious to one skilled in the art at the time of invention to modify York to utilize a transmission line in place of wireless RF links, thus reducing the signal loss that occurs from placing transmitter/receiver pairs in different rooms, to modify York to transmit digital video to make use of the higher quality video that a digital format offers, and to modify York to transmit TV control signals from one

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device to another as taught by Mullaly to enable a user to manipulate multiple devices in multiple locations.

Regarding claim 2, York discloses in figure 4 that hard wired lines connect both PC 1 and tuner 16 to one another, computer module 5 then transmits data wirelessly to RF AV receiver within TV module 12, additionally a cable modem 26 within base unit module 12, transmits cable modem data received from a cable outlet near TV 11, to a cable modem receiver 27 within computer module 5, the data is then relayed to PC 1 to be processed (column 3, lines 9-26, column 4, line 9-column 5, line 4, lines 31-53 column 6, line 53-column 7, line 7, column 7, line 56-column 8, line 43, column 8, lines 57-column 9, line 28). York and Mullaly fail to disclose the use of transmission lines to connect computer module 5, and base unit 12. The examiner takes official notice that the use of a transmission line to connect a PC peripheral to a television set top box is well known in the art. Therefore it would have been obvious to one skilled in the art at the time of invention to modify York to utilize a transmission line in place of wireless RF links, thus reducing the signal loss that occurs from placing transmitter/receiver pairs in different rooms

Regarding claim 3, York discloses in figure 4, a computer module 5, which includes a tuner/genlock cartridge 16, which has a built in TV tuner or STB that receives CATV data from a CATV network, Tuner/Genlock 16 outputs a television signal, or mixed TV signal with computer overlays, a VGA/NTSC encoder 9 outputs a computer signal, both the computer module 5 output and computer output are fed to RF AV transmitter 10, which transmits wirelessly to a base unit module 12, with RF receiver 15,



which is located near television 11, the data is then displayed on a television, a user may use a remote pointer or remote keyboard 13 to control both the computer, as well as program selection and other controls on the television, these commands are received by RF receiver 6, and fed into PC 1, a user may select which output they view, additionally a cable modem 26 within base unit module 12, transmits cable modem data received from a cable outlet near TV 11, to a cable modem receiver 27 within computer module 5, the data is then relayed to PC 1 to be processed (column 3, lines 9-26, column 4, line 9-column 5, line 4, lines 31-53 column 6, line 53-column 7, line 7, column 7, line 56-column 8, line 43, column 8, lines 57-column 9, line 28). York does not disclose transmission lines connecting the TV and computer transmission/receiving units, but instead utilizes wireless RF, and packet signals related to the computer and TV outputs nor does York disclose a TV signal.

Mullaly discloses a system in which a remote control unit with a trackball is used to issue a command to an appliance device which relays it to the intended device, which may be a television, personal computer, stereo or other home equipment which are networked together in a wireless or wire line network, in Figures 13a/b a user points the remote control device to a TV to control a GUI, the TV then generates a control signal which it sends to the intended receiving appliance to perform an action, for example, switching the audio output from the TV to the stereo (column 3, lines 4-45, column 8, lines 8-12, column 15, line 7-column 17, line 23).

The examiner takes official notice that utilizing a transmission line to connect a PC/STB to a television, and transmitting packetized video from different sources, such as a digital set top box is well known in the art.

Therefore it would have been obvious to one skilled in the art at the time of invention to modify York to utilize a transmission line in place of wireless RF links, thus reducing the signal loss that occurs from placing transmitter/receiver pairs in different rooms, to modify York to transmit digital video to make use of the higher quality video that a digital format offers, and to modify York to transmit TV control signals from one device to another as taught by Mullaly to enable a user to manipulate multiple devices in multiple locations.

Regarding claim 4, York discloses a PC 1, which generates video/audio signals, and transmits control commands to control tuner 16 (column 7, lines 54-column 8, line 23).

Regarding claims 5 and 6, York discloses in figure 4, a computer module 5, which includes a tuner/genlock cartridge 16, which has a built in TV tuner or STB that receives CATV data from a CATV network, Tuner/Genlock 16 outputs a television signal, or mixed TV signal with computer overlays, a VGA/NTSC encoder 9 outputs a computer signal, the both the computer module 5 output and computer output are fed to RF AV transmitter 10, which transmits wirelessly to a base unit module 12, with RF receiver 15, which is located near television 11, the data is then displayed on a television, a user may use a remote pointer or remote keyboard 13 to control both the computer, as well as program selection and other controls on the television, these

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commands are received by RF receiver 6, and fed into PC 1, a user may select which output they view, additionally a cable modem 26 within base unit module 12, transmits cable modem data received from a cable outlet near TV 11, to a cable modem receiver 27 within computer module 5, the data is then relayed to PC 1 to be processed (column 3, lines 9-26, column 4, line 9-column 5, line 4, lines 31-53 column 6, line 53-column 7, line 7, column 7, line 56-column 8, line 43, column 8, lines 57-column 9, line 28). York does not disclose transmission lines connecting the TV and computer transmission/receiving units, but instead utilizes wireless RF, and packet signals related to the computer and TV outputs, nor does York disclose the computer receiving a signal from a TV.

Mullaly discloses a system in which a remote control unit with a trackball is used to issue a command to an appliance device which relays it to the intended device, which may be a television, personal computer, stereo or other home equipment which are networked together in a wireless or wire line network, in Figures 13a/b a user points the remote control device to a TV to control a GUI, the TV then generates a control signal which it sends to the intended receiving appliance to perform an action, for example, switching the audio output from the TV to the stereo (column 3, lines 4-45, column 8, lines 8-12, column 15, line 7-column 17, line 23).

The examiner takes official notice that utilizing a transmission line to connect a PC/STB to a television, and transmitting packetized video from different sources, such as a digital set top box is well known in the art.

Therefore it would have been obvious to one skilled in the art at the time of invention to modify York to utilize a transmission line in place of wireless RF links, thus reducing the signal loss that occurs from placing transmitter/receiver pairs in different rooms, and to modify York to transmit digital video to make use of the higher quality video that a digital format offers and to modify York to transmit TV control signals from one device to another as taught by Mullaly to enable a user to manipulate multiple devices in multiple locations.

Regarding claims 7 and 8, York discloses a PC1 which receives commands from a remote mouse 14 and keyboard 13, which control both the display of TV 11 and pc 1, video is transmitted to NTSC encoder 9 which then transmits it to TV 11 via RF transmitter 10 and receiver 15, additionally a cable modem 26 within base unit module 12, transmits cable modem data received from a cable outlet near TV 11, to a cable modem receiver 27 within computer module 5, the data is then relayed to PC 1 to be processed (column 4, lines 9-column 5, line 4, column 7, line 55-column 8, line 24). York does not disclose receiving mouse, keyboard and control data from the TV, but instead receives it from wireless remotes.

Mullaly discloses a system in which a remote control unit with a trackball is used to issue a command to an appliance device which relays it to the intended device, which may be a television, personal computer, stereo or other home equipment which are networked together in a wireless or wire line network, in Figures 13a/b a user points the remote control device to a TV with line of sight to control a GUI, the TV then generates a control signal which it sends to the intended receiving appliance to perform an action,

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for example, switching the audio output from the TV to the stereo (column 3, lines 4-45, column 8, lines 8-12, column 15, line 7-column 17, line 23).

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify York to relay the control signals, including the Mouse and keyboard signals, from the television to the computer as taught by Mullaly thus simplifying the number of connections between the computer and the television.

Regarding claim 10, York discloses in figure 4, a computer module 5, which includes a tuner/genlock cartridge 16, which has a built in TV tuner or STB that receives CATV data from a CATV network, Tuner/Genlock 16 outputs a television signal, or mixed TV signal with computer overlays, a VGA/NTSC encoder 9 outputs a computer signal, both the computer module 5 output and computer output are fed to RF AV transmitter 10, which transmits wirelessly to a base unit module 12 that includes RF receiver 15, which is located near television 11, the data is then displayed on a television, a user may use a remote pointer or remote keyboard 13 to control both the computer, as well as program selection and other controls on the television, these commands are received by RF receiver 6, and fed into PC 1, a user may select which output they view, additionally a cable modem 26 within base unit module 12, transmits cable modem data received from a cable outlet near TV 11, to a cable modem receiver 27 within computer module 5, the data is then relayed to PC 1 to be processed (column 3, lines 9-26, column 4, line 9-column 5, line 4, lines 31-53 column 6, line 53-column 7, line 7, column 7, line 56-column 8, line 43, column 8, lines 57-column 9, line 28). York does not disclose transmission lines connecting the TV and computer

transmission/receiving units, but instead utilizes wireless RF, and packet signals related to the computer and TV outputs, nor does York disclose a TV signal.

Mullaly discloses a system in which a remote control unit with a trackball is used to issue a command to an appliance device which relays it to the intended device, which may be a television, personal computer, stereo or other home equipment which are networked together in a wireless or wire line network, in Figures 13a/b a user points the remote control device to a TV to control a GUI, the TV then generates a control signal which it sends to the intended receiving appliance to perform an action, for example, switching the audio output from the TV to the stereo (column 3, lines 4-45, column 8, lines 8-12, column 15, line 7-column 17, line 23).

The examiner takes official notice that utilizing a transmission line to connect a PC/STB to a television, and transmitting packetized video from different sources, such as a digital set top box is well known in the art.

Therefore it would have been obvious to one skilled in the art at the time of invention to modify York to utilize a transmission line in place of wireless RF links, thus reducing the signal loss that occurs from placing transmitter/receiver pairs in different rooms, to modify York to transmit digital video to make use of the higher quality video that a digital format offers, and to modify York to transmit TV control signals from one device to another as taught by Mullaly to enable a user to manipulate multiple devices in multiple locations.

Regarding claims 11, 18, 23, 28, and 33, Mullaly discloses a system in which a remote control unit with a trackball is used to issue a command to an appliance device

which relays it to the intended device, which may be a television, personal computer, stereo or other home equipment which are networked together in a wireless or wire line network, in Figures 13a/b a user points the remote control device to a TV to control a GUI, the TV then generates a control signal which it sends to the intended receiving appliance to perform an action, for example, switching the audio output from the TV to the stereo (column 3, lines 4-45, column 8, lines 8-12, column 15, line 7-column 17, line 23).

Mullaly is silent regarding the use of mouse or keyboard data.

York discloses in Figure 1, the use of a remote keyboard to issue commands.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Mullaly to utilize a wireless keyboard to make use of the additional buttons and text input a keyboard offers.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 6,189,148-B1 Methods and Circuits using Frequency Shift Keying Modulation to Transfer Data Over Transmission Lines Simultaneous with Television Signals.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within


TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hunter B. Lonsberry whose telephone number is 703-305-3234. The examiner can normally be reached on Monday-Friday during normal business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HBL



VIVEK SRIVASTAVA  
PRIMARY EXAMINER